Post-2015 health goals: could country-specific targets supplement global ones?

Although Millennium Development Goals 4, 5, and 6 have helped mobilise global action to improve health, many sub-Saharan African countries will not come close to achieving the maternal and child mortality targets.[1] Millennium Development Goals 4 and 5a, which call for a two-thirds reduction in under-5 mortality (U5MR) and a three-quarters reduction in maternal mortality (MMR) on the basis of reductions reported in a few countries outside of sub-Saharan Africa,[2] have been used as benchmarks against which to measure every country. By these measures, 75% of African countries are considered off-track[3] for both goals, despite often impressive gains. Grouping of all sub-Saharan African countries short of these targets as off-track does not differentiate between countries that are making impressive progress and those that are lagging behind reasonable expectations, rendering such targets of minimal use for planning and evaluation.[4] Because successful countries take into account existing resources and context when planning cross-sectoral investments to reduce maternal and child mortality,[5] the targets they aim for should also account for local contexts. While retaining the ambition of the global goals, country-specific targets might be more operational.[6]

With 2015 approaching and new goals for 2030 in discussion, a risk of again setting impracticable goals exists for countries where progress is most needed. Global targets for MMR of 70 per 100 000 livebirths, neonatal mortality (NMR) of 12 per 1000 livebirths, and U5MR of 25 per 1000 livebirths by 2030 are being discussed.[6,7] As a test of the practicality of these proposed targets, we determined how many countries could reach them under a regional best performance scenario.

To determine this best performance scenario, we calculated the average annual rate of decline for U5MR, NMR, and MMR in every low-income and middle-income country from 1990 to 2010. A few countries in each geographical region made substantially better-than-average progress (>4% reduction per year for NMR, >5% reduction per year for U5MR, and >6% reduction per year for MMR). We excluded countries classified as high-income (gross domestic product per head in 2012 >US$12 615). We also excluded the Maldives, an upper-middle-income country with annual rates of decline in U5MR and MMR of more than 9%, as an outlier. The best performance scenario in all cases was very optimistic, in that the regional best performance was usually around twice as fast as the regional average. If every country in the world progressed from 2010 to 2030 at the same rate as had the top performer in their region between 1990 and 2010, how many countries with mortality rates at present above the proposed 2030 targets would achieve them?

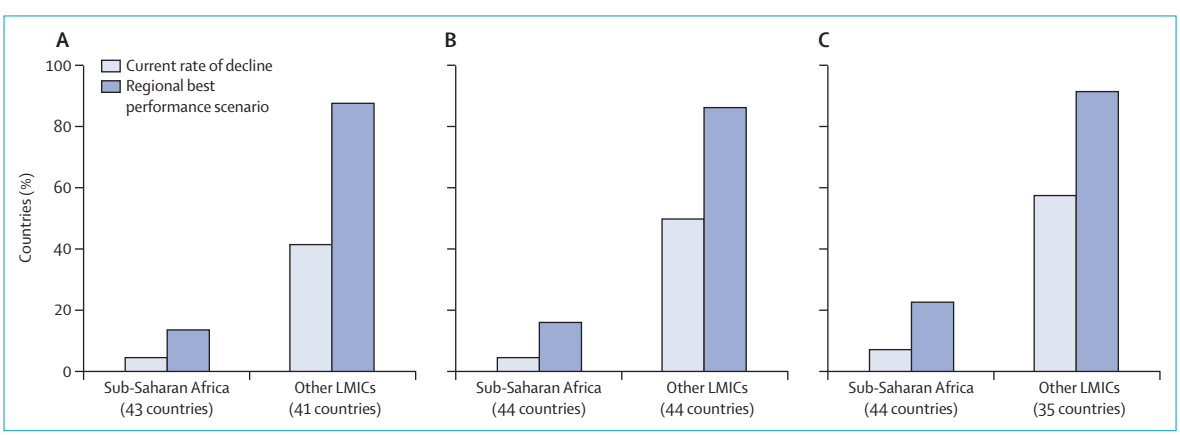

Figure: **Proportion of countries included in the analysis that would achieve by 2030 a maternal mortality (MMR) of 70 per 100 000 livebirths (A), neonatal mortality (NMR) of 12 per 1000 livebirths (B), and under-5 mortality (U5MR) of 25 per 1000 livebirths (C) under their present rate of progress and under a regional best performance scenario**

The best performance scenario imposes the best reported 1990–2010 annual rate of decline of the top performer in each World Bank region on all countries in that region from 2010 to 2030. Other LMICs=low-income and middle-income countries with MMR greater than 70 per 100 000 livebirths, NMR greater than 20 per 1000 livebirths, or U5MR greater than 25 per 1000 livebirths in 2010. These targets are among several similar-range global targets that have been proposed. The results barely change whether the target year is 2030 or 2035, or whether the global targets are slightly more or less ambitious.

For low-income and middle-income countries outside of sub-Saharan Africa, these MMR, NMR, and U5MR targets are appropriate and might even be too lax (figure). Around half of the countries outside of sub-Saharan Africa included in the analysis are on-track to meet the proposed targets in 2030, and in the regional best performance scenario more than 85% can meet them.

For sub-Saharan Africa, even in this hypothetical best-case scenario, most countries will fall short. Only six of 43 sub-Saharan African countries would reach an MMR of 70 per 100 000 livebirths, only seven would reach an NMR of 12 per 1000 livebirths, and only ten would reach a U5MR of 25 per 1000 livebirths if they all improved at the same rate as the top performer in their region from 1990 to 2010—Eritrea for MMR (6·3%), Cape Verde for NMR (3·5%), and Liberia for U5MR (5·3%). As one example of the impracticality of such a scenario, Gabon would have to improve more than seven times on its present MMR annual rate of decline of 0·8%—compared with Eritrea's 6·3%—to reach an MMR of 70 per 100 000 livebirths in 2030. If a country such as Chad, with an MMR of 1100 per 100 000 livebirths in 2010,[8] improved its MMR at 6·3% annually from 2010 to 2030, its MMR in 2030 would still be 300 per 100 000 livebirths.

Thus, even in a scenario where each country performs as well as the most successful country in its region recently has, the countries where progress is most needed will not meet the proposed MMR, NMR, and U5MR targets. Similar findings have been reported from other statistical modelling and analyses.[9] These countries will once again be labelled as failing even if they perform the best in their region.

Although global goals are important to galvanise shared global commitments, country-specific targets for 2030 could potentially supplement global ones, so that countries can plan around ambitious but achievable targets.

Development of country-specific targets should not be viewed as an imposition of restrictions on any individual country's progress. Rather, they would be most useful as empirically based operational targets that can guide investment and implementation, while remaining aspirational. Given the right mix of factors, some countries might perform above expectations, as did the Maldives.

Many possibilities exist to assist development of country-specific targets, including a regional best performance standard; a minimum performance target, perhaps adjusting for a country's gross domestic product and starting mortality rates; a target based on a statistical model of key enabling factors in health and other sectors;[10] and other proposals from global bodies and countries themselves, or some combination thereof.

Such country-specific targets could supplement the proposed global post-2015 targets in a way that maintains their strengths and minimises their drawbacks.

*Robert L Cohen, David M Bishai, Y Natalia Alfonso, Shyama Kuruvilla, *Julian Schweitzer*
Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA (RLC, DMB, YNA); The Partnership for Maternal, Newborn & Child Health, WHO, Geneva, Switzerland (SK); and Results for Development Institute, Washington, DC, USA (JS)
jschweitzer@r4d.org

We declare no competing interests.

1 United Nations. The Millennium Development Goals Report 2013. http://unstats.un.org/unsd/mdg/Resources/Static/Products/Progress2013/English2013.pdf (accessed June 1, 2014).
2 IMF, OECD, UN, World Bank Group. A better world for all; progress toward the international development goals. International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, World Bank Group, 2000.
3 UN Economic Commission for Africa. Report on progress in achieving the Millennium Development Goals in Africa, 2013. UN Economic Commission for Africa, 2013. http://www.uneca.org/sites/default/files/document_files/report-on-progress-in-achieving-the-mdgs-in-africa.pdf (accessed June 1, 2014).
4 Easterly, W. How the Millennium Development Goals are unfair to Africa. Brookings Global Economy and Development, Working Paper 14, 2007. Washington, DC: The Brookings Institution, 2007.
5 Kuruvilla S, Schweitzer J, Bishai D, et al. Success factors for reducing maternal and child mortality. *Bull World Health Organ* 2014; **92:** 533–44.
6 The Partnership for Maternal, Newborn, and Child Health. Placing healthy women and children at the heart of the post 2015 sustainable development framework. 2014. http://www.who.int/pmnch/post2015_policybrief.pdf?ua=1 (accessed June 1, 2014).
7 United Nations. Working Document for 5–9 May session of Open Working Group. Sustainable Development Knowledge Platform 2014. http://sustainabledevelopment.un.org/content/documents/3686WorkingDoc_0205_additionalsupporters.pdf (accessed June 1, 2014).
8 World Bank Databank. http://data.worldbank.org/ (accessed Jan 12, 2014).
9 Walker N, Yenokyan G, Friberg IK, Bryce J. Patterns in coverage of maternal, newborn, and child health interventions: projections of neonatal and under-5 mortality to 2035. *Lancet* 2013; **382:** 1029–38.
10 Bishai D, Cohen RL, Alfonso YN, Adam T, Kuruvilla S, Schweitzer J. Factors contributing to child mortality reductions in 142 low- and middle-income countries between 1990 and 2010. In: Population Association of America, 2014 Annual Meeting, Boston, USA, May 1, 2014. Silver Spring: Population Association of America, 2014. http://paa2014.princeton.edu/abstracts/140995 (accessed June 1, 2014).